1 3.4 BIOLOGICAL RESOURCES (TERRESTRIAL)

- 2 Due to the onshore and offshore components of the Project, impacts to Biological
- 3 Resources in this MND are assessed in two sections: Section 3.4, Biological Resources
- 4 (Terrestrial), which discusses potential impacts from onshore activities including work
- 5 proposed within the LFCPF tunnel; and Section 3.5, Biological Resources (Marine),
- 6 which discusses potential impacts from activities to be conducted from Project vessels
- 7 and platforms.

BIOLOGICAL RESOURCES (TERRESTRIAL) - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		\boxtimes		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		\boxtimes		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		\boxtimes		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?		\boxtimes		

8 3.4.1 Environmental Setting

9 The LFCPF is located in an area collectively called Las Flores Canyon. Components of 10 the LFCPF are positioned both upstream and downstream of the confluence of Las

1 Flores Creek and Corral Creek from immediately north of Calle Real (located 2 immediately north of U.S. 101, approximately 500 feet (152 m) north of the Pacific 3 Ocean), upstream to approximately 1.3 miles (2 km) north of the Pacific Ocean. Las 4 Flores Creek originates from the northwest portion of the watershed, and Corral Creek 5 originates from the northeast, where they meet at their confluence approximately 1.0 6 mile north of the Pacific Ocean. The main stem of Corral Creek then continues south 7 towards the ocean, where it is channeled into a concave bottom and arched-top 8 concrete culvert measuring approximately 9 feet (2.7 m) across and 10 feet (3 m) tall. 9 This culvert is located at the southwestern corner of the LFCPF, and heads beneath 10 Calle Real and U.S. 101 for a distance of approximately 400 feet (122 m), where it 11 discharges storm flows directly to the Pacific Ocean. Both Creeks are intermittent in 12 most years, exhibiting flashy storm flows in late fall and winter, and residual pools 13 during the remainders of most years.

14 Vegetation and habitat in Las Flores Canyon include a mosaic of chaparral, grassland, 15 and coastal sage scrub, with mature riparian forest or woodlands in the Canyon bottom. 16 Most of the areas disturbed in the upper Canyon area during initial construction of the 17 LFCPF were non-native grasslands with scattered stands of coastal sage scrub. 18 Ruderal and cultivated plant communities were also present due to past land use. In 19 addition, vegetation along both creeks was impacted. Streamside vegetation consisted 20 of well-developed riparian woodland dominated by large western sycamore (*Platanus* 21 racemosa) and occasional coast live oak (Quercus agrifolia) trees. The understory was 22 comprised of small trees including willow (Salix sp.) and blue elderberry (Sambucus 23 nigra ssp. caerulea) with other shrubs, vines and herbs. Oak woodland and chaparral 24 habitats occurred toward the northern end of the LFCPF construction site on slopes of 25 the Vagueros formation (SAIC 1994).

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To mitigate for impacts that occurred during the original LFCPF construction, ExxonMobil has participated in extensive revegetation efforts and an annual revegetation survey is performed. Both channels are currently characterized as exhibiting a natural streambed and banks, with a well-defined riparian corridor. Numerous overhanging banks, boulders, and a thick duff layer are present as suitable wildlife refugia throughout the creek areas. Vegetation mainly consists of an overstory of western sycamore, white alder (*Alnus rhombifolia*), California bay (*Umbellularia californica*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), blue elderberry and coast live oak, and an understory of California coffeeberry (*Frangula californica* ssp. *californica*), mugwort (*Artemisia douglasiana*), California blackberry (*Rubus ursinus*), mulefat (*Baccharis salicifolia*) and poison oak (*Toxicodendron diversilobum*). The lower portion above both banks of Corral Creek is actively cultivated with an avocado (*Persea americana*) orchard. Chaparral, coastal sage scrub and grassland habitats are relatively intact on slopes above the Canyon bottom.

Onshore Project activities will be focused at the lower end of the LFCPF where the cable tunnel's northern manhole is located approximately 50 feet south of the facilities' gated fence line. As shown on Figure 3.4-1, this area is cleared and has been previously graveled in support of previous site activities and for access to the northern manhole location. A site visit conducted by a Padre Associates, Inc. biologist in February 2014 noted the presence of recovered coastal sage scrub vegetation, along with ornamental myoporum (*Myoporum laetum*) trees along this slope immediately north of Calle Real. A single coast live oak tree is present on top of this slope.



Figure 3.4-1. View of Proposed Work Area at Lower End of the LFCPF

To the west of the manhole at the lower end of the LFCPF, a concrete trapezoidal drainage ditch is present that captures and drains stormwater toward Corral Creek to the west. Approximately 100 feet (30 m) west of the manhole, a thicket of arroyo willow trees is present over the drainage ditch (Figure 3.4-2), and the ditch enters a culvert beneath a fill slope that supports an alternate (however, fenced in) access route to the LFCPF. The culvert outlet is located on the back side of this fill slope, immediately east of Corral Creek.

The tunnel's southern manhole entrance is located directly south of the UPRR tracks that parallel the south side of U.S. 101, and the north side of the coastal bike path (Figure 3.4-3). Coastal sage scrub and non-native fountain grass (*Pennisetum setaceum*) vegetation surround the manhole on a steep, narrow 50-foot-wide strip that parallels the train tracks and bike path in an east-west orientation. The bike path is paved with asphalt, and includes a turnout and access ramp that enters the beach

- 1 below. A steep pathway through the vegetation from the train tracks to the manhole and 2
 - bike path is present, is mostly bare of vegetation, and is blocked by a barbed wire
- 3 fence.



Figure 3.4-2. View of Concrete Trapezoidal Ditch and Willow Thicket



Figure 3.4-3. View of Cable Tunnel's Southern Manhole at the Base of the Slope

1 Biological surveys are conducted in Las Flores Canyon every 5 years as mitigation for 2 impacts related to the initial Project construction and continued operation. No 3 endangered species are known to occur within the existing LFCPF areas. However, 4 several sensitive species are known to occur in Las Flores and Corral Creeks as 5 documented in the annual biological surveys. Such species include California red-6 legged frog (Rana draytonii, a Federally listed threatened species), Pacific pond turtle 7 (Actinemys marmorata, a State species of special concern), coast range newt (Taricha 8 torosa torosa, a State species of special concern) and two-striped garter snake 9 (Thamnophis hammondii, a State species of special concern). Southern steelhead 10 (Onchorynchus mykiss, a Federally listed endangered species) has historically been 11 observed in Las Flores and Corral Creeks.

12 Southern steelhead is protected under the Federal Endangered Species Act (FESA). 13 The National Marine Fisheries Service (NMFS) has jurisdiction over steelhead. The 14 NMFS' final designation (on September 2, 2005) of certain streams and rivers within the 15 South Coast Hydrologic Unit as critical habitat for steelhead trout includes Refugio and 16 El Capitan Creeks located 1 mile to the west and east, respectively. Corral and Las 17 Flores Creeks are not included within this critical habitat designation. Stoecker et al. 18 (2002) identified that a 4-foot-high drop at the outlet of the Corral Creek culvert onto the 19 back edge of El Capitan SB is an impassable barrier for steelhead trout. Therefore, 20 steelhead are not expected to be located in either creek. California red-legged frog is 21 protected under the FESA. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction 22 over California red-legged frog. The USFWS' revised final designation (on March 17, 23 2010) of critical habitat for California red-legged frog within 27 counties of California 24 including SBC Unit 6 (STB-6), which at its nearest location to LFCPF, includes the 25 Refugio Creek watershed located 1 mile to the west. Las Flores and Corral Creeks are 26 not included within this critical habitat designation. Nonetheless, multiple records of 27 California red-legged frog sightings exist within Las Flores and Corral Creeks.

In addition, since the initial survey during LFCPF site construction, other sensitive species have been observed in and near Las Flores and Corral creeks during the course of subsequent surveys, including golden eagle (*Aquila chrysaetos*, a State fully protected species, and protected by the Bald Eagle and Golden Eagle Protection Act of 1940 [as amended 1990]), prairie falcon (*Falco mexicanus*, a State watch list species), yellow warbler (*Dendroica petechia* ssp. *brewsteri*, a State species of special concern when nesting), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*, a State species of special concern), mountain lion (*Felis concolor*, special protected status in California - moratorium on hunting), and American badger (*Taxidea taxus*, a State species of special concern).

- The most recent biological survey was conducted in September 2012 (Garcia & Associates 2012), and represents the biological survey program's thirteenth survey.
- Twelve stations were initially surveyed along Las Flores and Corral Creeks every year,

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1 and surveys have since been scaled back to a biennial, and then to a 5-year frequency. 2 The closest station to the onshore construction area (ABS-1) is located approximately 3 400 feet (122 m) northwest of the proposed excavation area. No special-status herptiles 4 have been observed at this station during the years the survey has been conducted. 5 During the 2012 survey, Garcia & Associates noted that there were no surface flows, 6 the riparian canopy was mostly open and the channel was highly incised with poor pool 7 development, and adjacent upland land use of an avocado orchard, adobe buildings, 8 and ruderal character degrades the quality of riparian and upland habitat, making this 9 reach poor habitat for the four (4) target special-status herptiles. A site visit conducted 10 by a Padre Associates, Inc. biologist in February 2014 noted similar characteristics in 11 the vicinity of ABS-1 as described in the 2012 survey. The 2012 survey results 12 documented that the nearest observations of special-status species included the 13 presence of California red-legged frog and Pacific pond turtle at least 1.2 miles (1.9 km) 14 upstream between stations ABS-7 and ABS-11.

An autumnal monarch butterfly aggregation site was found in 1998 in sycamore trees along the Corral Creek, behind the three adobe structures in the lower canyon (Althouse and Meade 1999). Approximately 2,000 butterflies were documented, although significantly fewer have been documented during subsequent site visits. This site is notable as one of few aggregation sites that occur on native trees instead of Eucalyptus trees (*Eucalyptus sp.*). SBC Policy requires the protection of butterfly habitat and limits work that could potentially disturb aggregation and roost sites between October and February through establishment of a 50-foot (15.2-m) buffer zone for projects. The onshore excavation work would be located approximately 200 feet (61 m) from the site, which is approximately 150 feet (46 m) further than the SBC policy setback of 50 feet.

The USFWS administers the Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code [USC] 703-711). The purpose of the MBTA is the "establishment of a Federal prohibition, unless permitted by regulations, to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention for the protection of migratory birds, or any part, nest or egg of any such bird" (16 USC 703). Implementing regulations at 50 Code of Federal Regulations (CFR) 10 lists the migratory birds covered under the MBTA. The California Fish and Game Code (§§ 3503 and 3503.5) provides similar protection for most nesting birds, and defers to the MBTA list of protected birds. A majority of bird species occurring in Las Flores Canyon are protected by the MBTA when nesting (regardless of any special-status species protection). Given the suitable nesting and foraging habitat present within Las Flores Canyon, numerous bird species may be expected to nest within close proximity to the proposed onshore work areas.

1 3.4.2 Regulatory Setting

- 2 3.4.2.1 Federal and State
- 3 Federal and State laws and regulations pertaining to this issue area and relevant to the
- 4 Project are identified in Table 3.4-1.

Table 3.4-1. Laws, Regulations, and Policies (Biological Resources – Terrestrial)

U.S.	Endangered Species Act (FESA) (7 USC 136, 16 USC 1531 et seq.)	The FESA, which is administered in California by the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), provides protection to species listed as threatened or endangered, or proposed for listing as threatened or endangered. Section 9 prohibits the "take" of any member of a listed species. • Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." • Harass is "an intentional or negligent act or omission that creates the likelihood
		of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering."
		Harm is defined as "significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering."
		When applicants are proposing projects with a federal nexus that "may affect" a federally listed or proposed species, the federal agency is required to consult with the USFWS or NMFS, as appropriate, under Section 7, which provides that each federal agency must ensure that any actions authorized, funded, or carried out by the agency are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of areas determined to be critical habitat.
U.S.	Migratory Bird Treaty Act (MBTA) (16 USC 703-712)	The MBTA was enacted to ensure the protection of shared migratory bird resources. The MBTA prohibits the take, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit. The responsibilities of federal agencies to protect migratory birds are set forth in EO 13186. The USFWS is the lead agency for migratory birds. The USFWS issues permits for takes of migratory birds for activities such as scientific research, education, and depredation control, but does not issue permits for incidental take of migratory birds.
U.S.	Other	 The Bald and Golden Eagle Protection Act makes it illegal to import, export, take (including molest or disturb), sell, purchase or barter any bald eagle or golden eagle or parts thereof. Clean Water Act (33 USC 1251 et seq.) and Rivers and Harbors Act (33 USC 401) (see section 3.10, Hydrology and Water Quality). CZMA (see Table 1-3).
		 Executive Order 13112 requires federal agencies to use authorities to prevent introduction of invasive species, respond to and control invasions in a cost-effective and environmentally sound manner, and provide for restoration of native species and habitat conditions in invaded ecosystems. Executive Order 13158 requires federal agencies to identify actions that affect natural or cultural resources within a Marine Protected Area (MPA) and, in taking such actions, to avoid harm to the natural and cultural resources that are protected by a MPA.

CA	California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.)	The CESA provides for the protection of rare, threatened, and endangered plants and animals, as recognized by the California Department of Fish and Wildlife (CDFW), and prohibits the taking of such species without its authorization. Furthermore, the CESA provides protection for those species that are designated as candidates for threatened or endangered listings. Under the CESA, the CDFW has the responsibility for maintaining a list of threatened species and endangered species (Fish & G. Code, § 2070). The CDFW also maintains a list of candidate species, which are species that the CDFW has formally noticed as under review for addition to the threatened or endangered species lists. The CDFW also maintains lists of Species of Special Concern that serve as watch lists. Pursuant to the requirements of the CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the project site and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may affect a candidate species. The CESA also requires a permit to take a State-listed species through incidental or otherwise lawful activities (§ 2081, subd. (b)).
CA	Other relevant California Fish and Game Code sections	 The California Native Plant Protection Act (Fish & G. Code, § 1900 et seq.) is intended to preserve, protect, and enhance endangered or rare native plants in California. This Act includes provisions that prohibit the taking of listed rare or endangered plants from the wild and a salvage requirement for landowners. The Act directs the CDFW to establish criteria for determining what native plants are rare or endangered. Under section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered. The California Species Preservation Act (Fish & G. Code §§ 900-903) provides for the protection and enhancement of the amphibians, birds, fish, mammals, and reptiles of California. Fish and Game Code sections 3503 & 3503.5 prohibit the taking and possession of native birds' nests and eggs from all forms of needless take. These regulations also provide that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nests or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto. Fish and Game Code sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), & 5515 (fish) designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time without permission by the CDFW. Fish and Game Code section 3513 does not include statutory or regulatory mechanism for obtaining an incidental take permit for the loss of non-game, migratory birds.
CA	Coastal Act Chapter 3 policies (see also Table 1-3)	 Coastal Act policies applicable to this issue area are: Section 30230 states: Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes. Section 30231 addresses biological productivity and water quality. Section 30233, which applies in part to development activities within or affecting wetlands and other sensitive areas among other requirements, identifies eight allowable uses, requires that the proposed project be the least environmentally

damaging feasible alternative, and where applicable, requires feasible and appropriate mitigation.

- Section 30240 states: (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
 (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.
- 1 3.4.2.2 Local

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- 2 Local goals, policies, and/or regulations applicable to this issue area are listed below.
 - SBC Coastal Land Use Plan (Adopted 1982, Republished 2009) addresses environmentally sensitive habitat areas by using guiding policies set forth in the Coastal Act of 1976.
 - SBC Conservation Element (Adopted 1979, Amended 2010) Ecological Systems Section proposes the ecological goal for the County is to ensure that in 50 or 100 years the natural (and semi-natural) environments of the County will look much as they do today.
 - SBC Open Space Element (Adopted 1979, Republished 2009) Section 4
 addresses open space for the preservation of natural resources in wetlands, rare
 and endangered plant and wildlife communities, shoreline and dunes and scenic
 areas.
- 14 3.4.3 Impact Analysis
- 15 a) Have a substantial adverse effect, either directly or through habitat 16 modifications, on any species identified as a candidate, sensitive, or special
- 17 status species in local or regional plans, policies, or regulations, or by the
- 18 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 19 b) Have a substantial adverse effect on any riparian habitat or other sensitive
- 20 natural community identified in local or regional plans, policies, regulations or by
- 21 the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- 22 c) Have a substantial adverse effect on federally protected wetlands as defined by
- 23 Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal
- 24 pool, coastal, etc.) through direct removal, filling, hydrological interruption, or
- 25 other means?
- 26 d) Interfere substantially with the movement of any native resident or migratory
- 27 fish or wildlife species or with established native resident or migratory wildlife
- corridors, or impede the use of native wildlife nursery sites?

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- 3 f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural
- 4 Community Conservation Plan, or other approved local, regional, or State habitat
- 5 conservation plan?
- 6 a) f). Less than Significant with Mitigation. Onshore work at LFCPF would be
- 7 limited mainly to the lower Canyon parking area, which will be used as an area for
- 8 equipment and vehicle parking during construction efforts, retrieving onshore portions of
- 9 the old cables, pulling the new cables onshore, and splicing of the cables. Excavation
- 10 and trenching activities would be limited to completely developed or previously
- 11 disturbed areas from the parking area to the north tunnel manhole (Figure 3.4-4), and
- would minimize impacts to areas supporting native vegetation. The cable tunnel's
- 13 southern manhole will also be accessed from the bike path above El Capitan SB to
- bring in equipment to facilitate cable removal, conduit cleaning, conduit gauging, conduit
- 15 flushing, and video of operations. Any freshwater that has collected in the south end of
- 16 the tunnel from natural seepage will be pumped to the concrete trapezoidal ditch
- 17 adjacent to the north tunnel manhole and allowed to discharge to Corral Creek.
- 18 The term "biological resources" refers to plant and animal species and habitats that
- 19 support plant and animal species. Based on a preliminary site assessment and review
- 20 of existing historical resource information (designated environmentally sensitive habitat
- 21 areas, biological resources maps, reports, surveys and Natural Diversity Database
- 22 Maps), the lead agency determines whether resources on a site are biologically
- valuable and whether a project may result in a significant impact to biological resources.
- 24 Assessment of impacts must account for both short- and long-term impacts.
- 25 Disturbance to habitats or species may be significant, based on substantial evidence if it
- 26 1) substantially limits reproductive capacity through losses of individuals or habitat or 2)
- 27 substantially limits or fragments range and movement (geographic distribution or
- animals and/or seed dispersal routes). Based on these criteria, the Project would not
- 29 create any significant impacts on biological resources.
- 30 **Flora.** There would be no loss or disturbance to any unique, rare, or threatened plant
- 31 community as a result of the Project. Neither would there be a reduction in the numbers
- or restriction in the range of any unique, rare or threatened plant species or a reduction
- in extent, diversity, or quality of native vegetation. No significant amount of vegetation
- 34 with any habitat value or existing habitat would be impacted by the Project, and no
- 35 specimen trees would be removed. The onshore portion of the Project would be limited
- 36 to previously disturbed areas in the lower Canyon. Approximately 800 to 1,000 cubic
- 37 yards of material would be excavated to expose the two out-of-service and one in-
- 38 service submarine power cables and install the replacement cables. Excavated material

will be temporarily stored within the staging area (Figure 3.4-4). Some previously disturbed vegetation would be removed or disturbed, and restored with a native hydroseed mix after Project completion. The excavation site is approximately 500 feet (152.4 m) east of Corral Creek; therefore no impacts to riparian habitat would result.

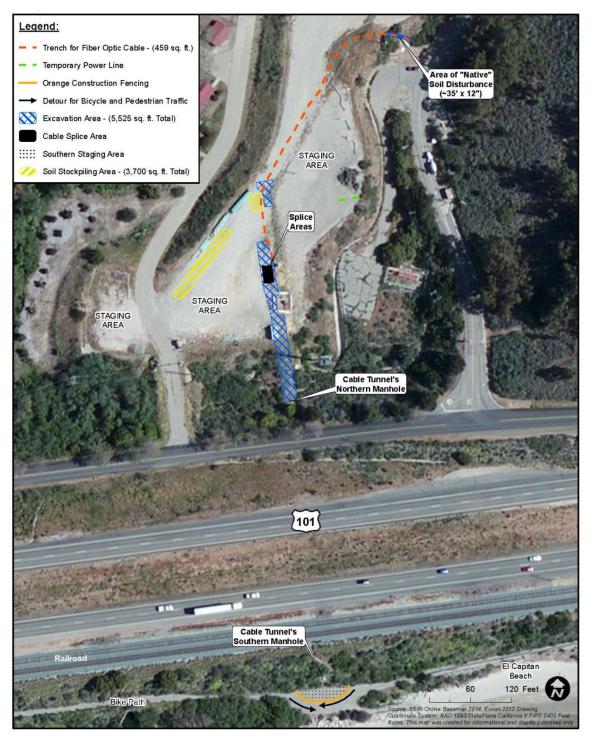


Figure 3.4-4. Onshore Areas of Disturbance

Fauna. The onshore Project area would be limited to the already developed lower Canyon parking lot approximately 500 feet (152.4 m) from riparian habitat. An autumnal monarch butterfly roost site is located in the lower Canyon, approximately 200 feet (61 m) from the Project site. SBC policy requires that development be set back 50 feet (15.2) m) from any potential butterfly aggregation or roosting sites. While the Project area would be approximately 500 feet (152.4 m) from the creek, Garcia & Associates (2012) reported the nearest sightings for Pacific pond turtle, California red-legged frog, two-striped garter snake, and coast range newt as between 1.2 and 1.4 miles (1.9 to 2.3 km) upstream. These species exhibit various levels of mobility, but based on their apparent absence in the lower Canvon and the progressive decrease of habitat suitability while heading downstream toward the Project area, the likelihood for these species to occur at the Project area is extremely low.

To protect special-status species and the butterfly roost, an environmental sensitivity program that ExxonMobil has implemented in the Canyon since 1994 is proposed for the Project. This program is designed to make workers aware of the presence of special-status species within the Canyon during routine work activities. A pamphlet describing the protection status and potential occurrence of these species in Corral and Las Flores Creeks is distributed to ExxonMobil personnel and contractors and subcontractors during safety briefings, which are held at least once a month. The pamphlet cautions workers to avoid handling these species and to be aware of their potential occurrence on roads near creeks. An environmental sensitivity training session for Project personnel, including a discussion on the contents of the pamphlet will be conducted by a qualified biologist during a pre-construction meeting (MM TBIO-1: Terrestrial Wildlife Awareness Training). The pamphlet would be distributed to the entire work crew during the training session. With proper implementation of avoidance and protection strategies described in the pamphlet, no impacts to any listed or sensitive species are expected to occur as a result of the Project.

Adjacent vegetated areas may provide breeding or nesting habitat for nesting migratory birds protected by the MBTA and Fish and Game Code, and some ground-nesting species may use gravel-covered areas within the lower Canyon area. Potential impacts to protected nesting migratory birds may include take in the form of disturbance to breeding/nesting activities, and possible trampling of active nests or nest abandonment for ground-nesting species during project activities. Implementation of MM TBIO-1 and MM TBIO-2: Breeding/Nesting Bird Protection) below will ensure that impacts to breeding and nesting birds are minimized or avoided to a less than significant level.

Onshore Project work will require temporary lighting within the lower canyon. These areas may be visible from U.S. Highway 101 and Calle Real. To reduce potential impacts caused by Project lighting, ExxonMobil shall implement **MM VIS-1: Glare Minimization**, to lessen substantial light and glare and ensure potential impacts due to temporary onshore lighting are less than significant.

- Aquatic Habitat. Collection and discharge of natural freshwater seepage from within the tunnel to the concrete trapezoidal ditch could temporarily introduce a small amount of surface water to Corral Creek, but is not expected to significantly impact biological resources. Per the County a permit is not required for the discharge of the accumulated seepage, as it is considered routine maintenance under the County's existing permit and included within the operating procedures manual, which is regularly reviewed by the County (Louie pers. comm., 2014). Any impacts due to other potential discharges associated with Project construction would be further reduced with the implementation of appropriate sampling and treating measures (MM WQ-2: Stormwater Pollution Prevention Plan (SWPPP)).
- 11 ExxonMobil shall implement the following MMs to reduce potential impacts to terrestrial resources to less than significant:
 - MM TBIO-1: Terrestrial Wildlife Awareness Training. ExxonMobil shall include awareness training for its contractors of the sensitive species located in Corral Creek. The training shall be conducted by a California State Lands Commission (CSLC) staff-approved biologist, and shall include a description of the species, protection status under the law, the potential range of movement, and what to do in the event one is found within the construction area. This training shall be incorporated into the pre-construction meeting(s) with construction personnel to perform the work. Training materials shall be submitted to CSLC staff for approval 3 weeks prior to the commencement of Project activities.
 - MM TBIO-2: Breeding/Nesting Bird Protection. If onshore Project activities are scheduled to occur between March 1 and August 31, to avoid or reduce potential impacts to nesting special-status avian species and/or avian species protected by the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, ExxonMobil shall retain a California State Lands Commission staff-approved biologist to conduct a pre-construction nesting survey for special-status avian species within 2 weeks prior to Project implementation. The survey shall be conducted within the Project and buffer areas during the appropriate survey periods for each species. Surveys and survey timing shall follow California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS)-approved protocols where applicable. Where active special-status or MBTA/Fish and Game Code-protected bird nest sites are identified or suspected to occur during preconstruction surveys, the approved biologist shall provide his/her survey results to the CDFW and USFWS. Upon discussion with Agency staff, an appropriate buffer zone around each nest site will be established depending on each species' protection status, each species' sensitivity or acclimation to human activities, and site conditions (i.e., vegetation and topography). Nesting buffer zones shall be marked with stakes, and signs shall be placed on the stakes

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indicating that no construction activities are to be conducted in the buffer areas until the areas are cleared by the approved biologist.

3.4.4 Mitigation Summary

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- 4 ExxonMobil has proposed to implement the following mitigation measures reduce the potential for impacts to terrestrial biological resources:
 - MM TBIO-1: Awareness Training.
 - MM TBIO-2: Breeding/Nesting Bird Protection.
- MM VIS-1: Glare Minimization (see Section 3.1.3).
- MM WQ-2: Stormwater Pollution Prevention Plan (SWPPP) (see Section 3.10.3).